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|--------------------------|-------------|----------------------|------------------------|------------------|
| APPLICATION NO.          | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
| 10/828,326               | 04/21/2004  | Jae-seong Shim       | 1293.1127C1            | 4237             |
| 49455                    | 7590        | 10/21/2008           | EXAMINER               |                  |
| STEIN, MCEWEN & BUI, LLP |             |                      | CERVELLI, DAVID GARCIA |                  |
| 1400 EYE STREET, NW      |             |                      | ART UNIT               | PAPER NUMBER     |
| SUITE 300                |             |                      | 2436                   |                  |
| WASHINGTON, DC 20005     |             |                      | MAIL DATE              |                  |
|                          |             |                      | 10/21/2008             |                  |
|                          |             |                      | DELIVERY MODE          |                  |
|                          |             |                      | PAPER                  |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |  |  |
|------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/828,326     | <b>Applicant(s)</b><br>SHIM, JAE-SEONG |
|                              | <b>Examiner</b><br>David Garcia Cervetti | <b>Art Unit</b><br>2436                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 02 October 2008.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1 and 3-15 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1 and 3-15 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 21 April 2004 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. 09/620,462.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/06)  
Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

1. Applicant's arguments filed October 2, 2008, have been fully considered.
2. Claims 1 and 3-15 are pending and have been examined. Claim 2 has been canceled.

***Response to Amendment***

3. The double patenting rejection based on copending application 10/828,327 is withdrawn in view of the terminal disclaimer filed 10/02/2008.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1 and 3-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1 and 3-15 do not produce a Useful, Concrete, and Tangible result, they operate on data but do not store or use it (see MPEP 2106).

***Double Patenting***

6. Claims 1 and 3-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of Patent 7,277,545. Although the conflicting claims are not identical, they are not patentably distinct from each other because

- "a data scrambling method using a random data generator for a high density optical recording/reproducing apparatus using an optical disc, the data scrambling method comprising:

- generating random data having a random data generation cycle based on a result by multiplying at least a size of a first data frame by a result, which is obtained by dividing a data amount of two tracks in an outermost circumference of the optical disc by a size of a second data frame, wherein the size of the first data frame is a sector, and the size of the second data frame is an error correction block" (claim 1, instant application) is analogous to
- "A data scrambler for a high density optical recording and/or reproducing apparatus using an optical disc, the data scrambler comprising:
- a random data generator which generates random data having a random data generation cycle based on a result obtained by multiplying at least a size of a first data frame by a result obtained by dividing a data amount of two tracks in an outermost circumference of the optical disc by a size of a second data frame, wherein the random data generator comprises:
- serially arranged registers, which shift-store n bits and generate the random data, and use a total of n values as initial values, including a first initial value and register values, which are supplied in each 4K times left - shifting of the first initial value,
- a first serial logic circuit having a plurality of logic gates, which exclusive- ORs outputs of a first group of the registers which correspond to a number of effective branches with a predetermined branch value, and feedbacks the random data to a least significant register,

- wherein the data scrambler further comprises a second logic circuit which scrambles outputs of a second group of registers and input data and outputs scrambled data in units of bytes to the recording and/or reproducing apparatus" (**claim 1, patent**).

7. This is a provisional obviousness-type double patenting rejection because the conflicting claims of the instant application have not in fact been patented.

8. Claims 1-29 of the patent contain every element of claims 1 and 3-15 of the instant application and thus anticipate the claims of the instant application. Claims 1 and 3-15 of the instant application therefore are not patentably distinct from the patent's claims and as such are unpatentable for obvious-type double patenting. A later patent/application claim is not patentably distinct from an earlier claim if the later claim is anticipated by the earlier claim.

9. "A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or anticipated by, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species with that genus). "ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

10. "Claim 12 and Claim 13 are generic to the species of invention covered by claim 3 of the patent. Thus, the generic invention is "anticipated" by the species of the patented invention. Cf., Titanium Metals Corp. v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (holding that an earlier species disclosure in the prior art defeats any generic claim) 4. This court's predecessor has held that, without a terminal disclaimer, the species claims preclude issuance of the generic claim. In re Van Ornum, 686 F.2d 937, 944, 214 USPQ 761, 767 (CCPA 1982); Schneller, 397 F.2d at 354. Accordingly, absent a terminal disclaimer, claims 12 and 13 were properly rejected under the doctrine of obviousness-type double patenting." (In re Goodman (CA FC) 29 USPQ2d 2010 (12/3/1993).

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David García Cervetti whose telephone number is (571)272-5861. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday.
12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on (571)272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David García Cervetti/  
Primary Examiner, Art Unit 2436